

Application No.: 09/507,484

Amendment Date: May 20, 2004

Reply to office action of February 25, 2004

Amendments to the Claims

Listing of Claims

This listing of the claims will replace all prior versions, and listings, of claims in the application.

CLAIMS

- 1 (Currently amended) A method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:
 - responsive to receiving user instructions to download a web page, commencing downloading of the web page;
 - identifying any hyperlinks present in the web page;
 - for each identified hyperlink, analyzing the hyperlink by performing steps comprising:
 - determining whether one or more users in a predefined access group have previously selected the identified hyperlink to download underlying data represented by the hyperlink;
 - only if one or more users in the predefined access group have previously selected the hyperlink, consulting a database to identify characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group;

referencing the identified characteristics against a presentation table to derive enhanced presentation attributes appropriate to the hyperlink; and displaying the downloaded web page, including presenting each hyperlink with its derived enhanced presentation attributes; and responsive to the user selecting a hyperlink to download underlying data represented by the hyperlink, the computer downloading the underlying data represented by the hyperlink, and recording predetermined characteristics of the underlying data in the database.

- 2 (Original) The method of claim 1, the predefined access group having a single member.
- 3 (Original) The method of claim 1, the predefined access group having multiple members, where the database is accessible to all members.
- 4 (Original) The method of claim 1, the operations further including:
prior to analyzing the hyperlink, selecting the database from multiple available databases.
- 5 (Original) The method of claim 1, the operations of presenting each hyperlink with its derived enhanced presentation attributes including at least one of the following:
displaying text, displaying graphics, generating sound, providing tactile output.
- 6 (Original) The method of claim 1, where the displaying operation comprises:
initially displaying the web page such that hyperlinks are free from enhanced presentation attributes;
the computer awaiting predetermined user input including direction of a cursor proximate any of the displayed hyperlinks; and

responsive to the predetermined user input occurring for a hyperlink, presenting the hyperlink with its derived enhanced presentation attributes.

7 (Original) The method of claim 6, the predetermined user input additionally including depressing of one or more buttons on a computer mouse while the cursor is proximate the hyperlink.

8 (Currently Amended) A method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:

responsive to receiving user instructions to download a web page, commencing downloading of the web page;

identifying any hyperlinks present in the web page;

for each identified hyperlink, analyzing the hyperlink by performing steps comprising:

determining whether one or more users in a predefined access group have previously selected the identified hyperlink to download underlying data represented by the hyperlink;

only if one or more users in the predefined access group have previously selected the

hyperlink, consulting a database to identify characteristics of the underlying data

obtained from previous selections of the hyperlink by users in the access group;

referencing the identified characteristics against a presentation table to derive

enhanced presentation attributes appropriate to the hyperlink;

displaying the downloaded web page, including presenting each hyperlink with its

derived enhanced presentation attributes;

responsive to the user selecting a hyperlink to download underlying data represented by the hyperlink:

the computer soliciting user specification of one or more of the following in association with the underlying data:

user rating of the underlying data;

one or more representative multimedia symbols of one or more of the following types: graphics images, sounds, videos, animations, tactile sensations; and

the computer recording the user specification in the database in association with the hyperlink.

9 (Original) The method of claim 6, further comprising:

sensing when the predetermined user input is absent, and then presenting the hyperlink free from its enhanced presentation attributes.

10 (Cancelled)

11 (Original) The method of claim 1, where the characteristics of the underlying data obtained from previous selections include one or more of the following:

size of the underlying data;

dates of one or more previous selections of the hyperlink;

times of one or more previous selections of the hyperlink;

a length of time to download the underlying data;

one or more multimedia representative symbols, including one or more of the following: graphics, sound, animation, video;

number of previous selections of the hyperlink;
user ratings of the underlying data;
whether the underlying data constitutes a web site that is under construction;
whether the hyperlink represents an expired link;
whether the user has bookmarked the underlying data;
any errors occurring during previous selections of the hyperlink.

12 (Original) The method of claim 1, the enhanced presentation attributes including one or more of the following: changes in text font, changes in text color, changes in text underlining, addition of specialty characters, addition of images.

13 (Currently amended) A method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:

responsive to receiving user instructions to download a web page, commencing downloading of the web page;

identifying any hyperlinks present in the web page;

for each identified hyperlink, analyzing the hyperlink by performing steps comprising:

determining whether one or more users in a predefined access group have previously selected the identified hyperlink to download underlying data represented by the hyperlink;

only if one or more users in the predefined access group have previously selected the hyperlink, consulting a database to identify characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group;

referencing the identified characteristics against a presentation table to derive
enhanced presentation attributes appropriate to the hyperlink;
displaying the downloaded web page, including presenting each hyperlink with its
derived enhanced presentation attributes;
determining whether the computer has received predetermined user input including
direction of a cursor proximate a hyperlink; and
where performance of the analyzing operation for each hyperlink is conditioned upon
receipt of the predetermined user input for that hyperlink.

- 14 (Currently amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:
- responsive to receiving user instructions to download a web page, commencing
downloading of the web page;
 - identifying any hyperlinks present in the web page;
 - for each identified hyperlink, analyzing the hyperlink by performing steps comprising:
 - determining whether one or more users in a predefined access group have previously
selected the identified hyperlink to download underlying data represented by the
hyperlink;
 - only if one or more users in the predefined access group have previously selected the
hyperlink, consulting a database to identify characteristics of the underlying data
obtained from previous selections of the hyperlink by users in the access group;

referencing the identified characteristics against a presentation table to derive enhanced presentation attributes appropriate to the hyperlink; and displaying the downloaded web page, including presenting each hyperlink with its derived enhanced presentation attributes; and responsive to the user selecting a hyperlink to download underlying data represented by the hyperlink, the computer downloading the underlying data represented by the hyperlink, and recording predetermined characteristics of the underlying data in the database.

15 (Original) The medium of claim 14, the predefined access group having a single member.

16 (Original) The medium of claim 14, the predefined access group having multiple members, where the database is accessible to all members.

17 (Original) The medium of claim 14, the operations further including:

prior to analyzing the hyperlink, selecting the database from multiple available databases.

18 (Original) The medium of claim 14, the operations of presenting each hyperlink with its derived enhanced presentation attributes including at least one of the following:

displaying text, displaying graphics, generating sound, providing tactile output.

19 (Original) The medium of claim 14, where the displaying operation comprises:

initially displaying the web page such that hyperlinks are free from enhanced presentation attributes;

the computer awaiting predetermined user input including direction of a cursor proximate any of the displayed hyperlinks; and

responsive to the predetermined user input occurring for a hyperlink, presenting the hyperlink with its derived enhanced presentation attributes.

20 (Original) The medium of claim 19, the predetermined user input additionally including depressing of one or more buttons on a computer mouse while the cursor is proximate the hyperlink.

21 (Currently amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:
responsive to receiving user instructions to download a web page, commencing
downloading of the web page;
identifying any hyperlinks present in the web page;
for each identified hyperlink, analyzing the hyperlink by performing steps comprising:
determining whether one or more users in a predefined access group have previously
selected the identified hyperlink to download underlying data represented by the
hyperlink;
only if one or more users in the predefined access group have previously selected the
hyperlink, consulting a database to identify characteristics of the underlying data
obtained from previous selections of the hyperlink by users in the access group;
referencing the identified characteristics against a presentation table to derive
enhanced presentation attributes appropriate to the hyperlink; and

displaying the downloaded web page, including presenting each hyperlink with its
derived enhanced presentation attributes;

responsive to the user selecting a hyperlink to download underlying data represented by
the hyperlink:

the computer soliciting user specification of one or more of the following in
association with the underlying data:

user rating of the underlying data;

one or more representative multimedia symbols of one or more of the following
types: graphics images, sounds, videos, animations, tactile sensations; and

the computer recording the user specification in the database in association with the
hyperlink.

22 (Original) The medium of claim 19, further comprising:

sensing when the predetermined user input is absent, and then presenting the hyperlink
free from its enhanced presentation attributes.

23 (Cancelled)

24 (Original) The medium of claim 14, where the characteristics of the underlying data obtained
from previous selections include one or more of the following:

size of the underlying data;

dates of one or more previous selections of the hyperlink;

times of one or more previous selections of the hyperlink;

a length of time to download the underlying data;

one or more multimedia representative symbols, including one or more of the following:

- graphics, sound, animation, video;
- number of previous selections of the hyperlink;
- user ratings of the underlying data;
- whether the underlying data constitutes a web site that is under construction;
- whether the hyperlink represents an expired link;
- whether the user has bookmarked the underlying data;
- any errors occurring during previous selections of the hyperlink.

25 (Original) The medium of claim 14, the enhanced presentation attributes including one or more of the following: changes in text font, changes in text color, changes in text underlining, addition of specialty characters, images.

26 (Currently amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for operating a computer to display historical information about hyperlinks shown on web pages, the method comprising the following operations performed by the computer:
responsive to receiving user instructions to download a web page, commencing
downloading of the web page;
identifying any hyperlinks present in the web page;
for each identified hyperlink, analyzing the hyperlink by performing steps comprising:
determining whether one or more users in a predefined access group have previously
selected the identified hyperlink to download underlying data represented by the
hyperlink;

only if one or more users in the predefined access group have previously selected the hyperlink, consulting a database to identify characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group; referencing the identified characteristics against a presentation table to derive enhanced presentation attributes appropriate to the hyperlink;
displaying the downloaded web page, including presenting each hyperlink with its derived enhanced presentation attributes;
determining whether the computer has received predetermined user input including direction of a cursor proximate a hyperlink; and
where performance of the analyzing operation for each hyperlink is conditioned upon receipt of the predetermined user input for that hyperlink.

27 (Currently amended) An information system, comprising:

a storage including a database; and
a computer, coupled to the storage and configured to display historical information about hyperlinks shown on web pages by performing operations comprising:
responsive to receiving user instructions to download a web page, commencing downloading of the web page;
identifying any hyperlinks present in the web page;
for each identified hyperlink, analyzing the hyperlink by performing steps comprising:

determining whether one or more users in a predefined access group have previously selected the identified hyperlink to download underlying data represented by the hyperlink;

only if one or more users in the predefined access group have previously selected the hyperlink, consulting a database to identify characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group;

referencing the identified characteristics against a presentation table to derive enhanced presentation attributes appropriate to the hyperlink; and

displaying the downloaded web page, including presenting each hyperlink with its derived enhanced presentation attributes; and

responsive to the user selecting a hyperlink to download underlying data represented by the hyperlink, the computer downloading the underlying data represented by the hyperlink, and recording predetermined characteristics of the underlying data in the database.